



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

U.N. DECADE OF THE OCEAN

TOWARD A SUSTAINABLE MARINE TRANSPORTATION SYSTEM



EVENT OVERVIEW

December 14, 2021

In support of the United Nations Decade of Ocean Science for sustainable Development [<https://en.unesco.org/ocean-decade>], the U.S. Committee on the Marine Transportation System (www.CMTS.gov) partnered with the Embassy of Denmark and Norwegian Embassy to co-host a virtual public forum for meaningful discussion on applied science and technologies toward a more sustainable marine transportation system (MTS) for healthier oceans. The public webinar was held virtually via WebEx on Tuesday, December 14 from 0900 – 1100 U.S. Eastern Time.

Opening remarks provided by Ms. Lucinda Lessley, Acting Administrator of the Maritime Administration, DOT and current Chair of the CMTS Coordinating Board, included an overview of the many ongoing initiatives by U.S. federal agencies engaged in efforts to decarbonize maritime transportation and make the maritime environment more sustainable. Mr. Julian Barbière, Head of Marine Policy and Regional Coordination Section, Ocean Decade Focal Point, UNESCO – IOC provided an overview on the Decade of Ocean Science. Ms. Monica Medina, Assistant Secretary, Bureau of Oceans and International Environmental and Scientific Affairs, U.S. Dept. of State gave an overview of IMO decarbonization initiatives and an update from COP26, stressing the importance of international cooperation in meeting the goals of the Paris Climate Agreement. Ms. Medina further mentioned the importance of international agreements such as the Clydebank Declaration (signed by 22 countries including the U.S., Norway, and Denmark) in reducing greenhouse gas emissions and keep climate change to 1.5 degrees Celsius by 2050.

The event also featured a panel of international representatives engaged in applied science and technologies fostering a more sustainable MTS including Dr. Arne Fredheim, Research Director with the Norwegian University of Science and Technology, Mr. Claus Winter Graugaard, Head of Onboard Vessel Solutions with the Maersk McKinney Moller Center for Zero Carbon Shipping, Dr. Joe Pratt, CEO and CTO of Zero Emission Industries, and Mr. Øystein Huglen, Head of Innovation and Project Development, NCE Maritime CleanTech. The panel and following discussion included insight into the specific challenges related to application of sustainable technologies in shipping compared to other industries by Mr. Huglen. Dr. Pratt explained the unique position for the U.S. to take advantage of hydrogen and hydrogen fuel cells due to existing supporting infrastructure and the different applications for hydrogen fuel cells and battery power. Mr. Fredheim elaborated on the importance of improving energy efficiency and utilizing various E-fuels for implementation, with solutions varying depending upon the vessel type and operations. Mr. Graugaard further stressed the importance of regulations in driving decreased maritime greenhouse gas emissions, noting that industry leadership cannot meet the challenge alone. The event was moderated by Ms. Helen Brohl, Executive Director of the CMTS.